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Billing Code: 4140-01-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

**National Institutes of Health** 

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health.

ACTION: Notice.

SUMMARY: The invention listed below is owned by an agency of the U.S. Government and is available for licensing and/or co-development in the U.S. in accordance with 35 U.S.C. 209 and 37 CFR part 404 to achieve expeditious commercialization of results of federally-funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing and/or co-development.

DATES: Only written comments and/or applications for a license which are received by the National Cancer Institute, Technology Transfer Center on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] will be considered.

ADDRESSES: Invention Development and Marketing Unit, Technology Transfer Center, National Cancer Institute, 9609 Medical Center Drive, Mail Stop 9702, Rockville, MD, 20850-9702.

FOR FURTHER INFORMATION CONTACT: Information on licensing and codevelopment research collaborations, and copies of the U.S. patent applications listed below may be obtained by contacting: Attn. Invention Development and Marketing Unit, Technology Transfer Center, National Cancer Institute, 9609 Medical Center Drive, Mail

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Stop 9702, Rockville, MD, 20850-9702, Tel. 240-276-5515 or email ncitechtransfer@mail.nih.gov. A signed Confidential Disclosure Agreement may be required to receive copies of the patent applications.

SUPPLEMENTARY INFORMATION: Technology description follows.

<u>Title of invention:</u> A Novel Fully-Human Anti-CD30 Chimeric Antigen Receptor for Treatment of CD30+ Lymphoma

<u>Description of Technology:</u> Chimeric antigen receptors (CARs) are hybrid proteins that consist of two major components: a targeting domain and a signaling domain. The targeting domain allows T cells which express the CAR to selectively recognize and bind to diseased cells that express a particular protein. Once the diseased cell is bound by the targeting domain of the CAR, the signaling domain of the CAR activates the T cell, thereby allowing it to kill the diseased cell. This is a promising new therapeutic approach known as adoptive cell therapy (ACT).

Researchers at the National Cancer Institute's Experimental Transplantation and Immunology Branch developed a CAR that recognizes human tumor necrosis factor receptor superfamily member 8 (TNFRSF8, also known as CD30). The expression of CD30 is deregulated in a variety of human cancers, including many lymphomas. By creating a CAR that recognizes CD30, it may be possible to treat these cancers using adoptive cell therapy.

#### Potential Commercial Applications:

- Treatment of human cancers associated with expression of CD30 or variants thereof
- Specific cancers include: Non-Hodgkins Lymphomas, Hodgkin's Lymphomas, several solid malignancies

### Value Proposition:

- Human components are less likely to cause adverse or neutralizing immune response in patients
- Targeted therapies decrease non-specific killing of healthy cells and tissues, resulting in fewer off-target side-effects and healthier patients

## **Development Stage:**

In vivo/Lead Validation

## <u>Inventor(s)</u>:

Jim N. Kochenderfer, M.D. (NCI)

### **Intellectual Property:**

HHS Reference No. E-001-2016/0-US-01

US Provisional Application 62/241,896 (HHS Reference No. E-001-2016/0-US-01) filed October 15, 2015 entitled "A Novel Fully-Human Anti-CD30 Chimeric Antigen Receptor for Treatment of CD30+ Lymphoma"

<u>Licensing Opportunity:</u> Researchers at the NCI seek licensees for a chimeric antigen receptor (CAR) that recognizes human tumor necrosis factor receptor superfamily member 8 (TNFRSF8, also known as CD30) for use as a cancer therapeutic.

# **Contact Information:**

Requests for copies of the patent application or inquiries about licensing and/or research collaboration and co-development opportunities should be sent to John D. Hewes. Ph.D., email: john.hewes@nih.gov.

Dated: December 22, 2015.

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Thomas M. Stackhouse

**Associate Director** 

Technology Transfer Center

National Cancer Institute

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